

ABSTRACT

To manufacture a plastic oil pan having an integrated oil filter, a first filter component is assembled. This first filter component includes a filter medium and an oil pan integrated surface section. In addition, the first filter component is placed into a first tool, a second component is placed in a second tool, and the second tool is closed on to the first tool so that a first flange of the first filter component is pressed unto a second flange of the second filter component. Furthermore, the first flange is vibration welded to the second flange. In this manner, the second filter component is fixed upon the oil pan integrated surface section to create a hermetic seal between the second filter component and the oil pan integrated surface section. Moreover, the second tool is separated from the first tool and the oil pan having the integrated oil filter is removed.